

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 14 February 2005		2. REPORT TYPE FINAL		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE Transforming the Joint Force Air Component Commander's Command and Control of Close Air Support				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Michael J. Homola, Maj, USAF Paper Advisor (if Any): Thomas D. Huizenga, Lt Col, USAF				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Joint Military Operations Department Naval War College 686 Cushing Road Newport, RI 02841-1207				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution Statement A: Approved for public release; Distribution is unlimited.					
13. SUPPLEMENTARY NOTES A paper submitted to the faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.					
14. ABSTRACT Transformation initiatives in the Department of Defense have major implications on the development of command and control structures in the joint environment. Alternative methodology will be required to rupture outdated tactics, techniques, and procedures established under legacy systems and organizational architectures. Taking into account newly developed concepts, such as the Air Component Coordination Element (ACCE), future command and control systems must build on lessons learned and continue to seek improvements for critical mission taskings. Lessons learned in Operations ENDURING FREEDOM and IRAQI FREEDOM indicate close air support remains a controversial topic due to the availability of air assets and fratricide. Since command and control of close air support is tied to the authority of the Joint Air Operations Center (JAOC) in joint doctrine, the responsibility lies with the JAOC to ensure senior ground elements are supported according to the Joint Force Commander's priorities. Establishing a modular Joint Air Component Coordination Element (JACCE) in the command and control architecture with expanded authorities will in due course eliminate deficiencies and enhance the interconnectivity of the functional land component commander with the functional air component commander.					
15. SUBJECT TERMS Joint Force Air Component Commander, JFACC, Air Component Coordination Element, ACCE, Close Air Support, CAS, Joint Air Component Coordination Element, JACCE					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 23	19a. NAME OF RESPONSIBLE PERSON Chairman, JMO Dept
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED			19b. TELEPHONE NUMBER (include area code) 401-841-3556

**NAVAL WAR COLLEGE
Newport, RI**

**Transforming the Joint Force Air Component Commander's Command and
Control of Close Air Support**

By

**Michael J. Homola
Major, USAF**

**A paper submitted to the faculty of the Naval War College in partial satisfaction
of the requirements of the Department of Joint Military Operations.**

**The contents of this paper reflect my own personal views and are not necessarily
endorsed by the Naval War College or the Department of the Navy.**

Signature:_____

14 February 2005

**Thomas D. Huizenga
Lt Col, USAF
JMO Faculty**

Abstract

TRANSFORMING THE JOINT FORCE AIR COMPONENT COMMANDER'S COMMAND AND CONTROL OF CLOSE AIR SUPPORT

Transformation initiatives in the Department of Defense have major implications on the development of command and control structures in the joint environment. Alternative methodology will be required to rupture outdated tactics, techniques, and procedures established under legacy systems and organizational architectures. Taking into account newly developed concepts, such as the Air Component Coordination Element (ACCE), future command and control systems must build on lessons learned and continue to seek improvements for critical mission taskings.

The critical mission task of close air support has received a heightened amount of attention within the services as lessons learned in Operations ENDURING FREEDOM and IRAQI FREEDOM are compiled. These same lessons learned indicate close air support remains a controversial topic due to the availability of air assets and fratricide. Since command and control of close air support is tied to the authority of the Joint Air Operations Center (JAOC) in joint doctrine, the responsibility lies with the JAOC to ensure senior ground elements are supported according to the Joint Force Commander's priorities. Establishing a modular Joint Air Component Coordination Element (JACCE) in the command and control architecture with expanded authorities will in due course eliminate deficiencies and enhance the interconnectivity of the functional land component commander with the functional air component commander.

Table of Contents

Introduction	1
Thesis	1
Overview	2
Analysis	6
Recommendations	12
Conclusion	19
Bibliography	21

Introduction

The time honored discussions concerning close air support between soldiers, marines, sailors and airmen have enveloped the military services since the inception of the airplane as a military weapon prior to World War I. Following the 1991 Gulf War, the Air Force's dedication to the close air support mission was routinely called into question by many defense experts as the Air Force concentrated on tactics, techniques, and procedures for interdiction as the primary air-to-ground mission. The technological advancement of aircraft weapons systems and ordinance at the end of the 20th century and the beginning of the 21st century led to the operational concept that precision strikes with multi-role aircraft can be accomplished in any ground combat environment, to include emergency close air support requests under centralized control.¹ Although this perception is not entirely accurate or based on current Air Force doctrine, soldiers and marines consistently identify lessons learned in reports and military journals regarding uncoordinated or lack of air support within their operational maneuver area. A skeptical eye seems to be cast skyward by U.S. ground forces each time the Air Force speaks of close air support and the command and control requirements associated with it.

Thesis

Centralized planning and direction along with decentralized execution are fundamental concepts for organizing joint forces at the operational and tactical levels of war to include air support of ground forces.² A responsive command and control

¹ Douglas N. Campbell, The Warthog and the Close Air Support Debate (Annapolis, MD: Naval Institute Press, 2003), 184-190.

² Joint Chiefs of Staff, Joint Doctrine for Command and Control for Joint Air Operations, Joint Pub 3-30 (Washington, DC: 5 June 2003), I-1-I-3.

structure is vital to ensure close air support requirements from the functional land component commander are allocated by the functional air component commander, and concerns of uncoordinated air strikes and insufficient support are alleviated. The doctrinal Joint Air Operations Center (JAOC) structure remains effective for strategic and operational air apportionment decisions but does not provide procedural expertise, efficiency, and flexibility to the functional land component commander in the operational and tactical environment when close air support evolves into the priority mission.

Overview

The flexibility and maneuverability of airpower allows the Joint Force Air Component Commander (JFACC), designated by the Joint Forces Commander (JFC) or Commander Joint Task Force (CJTF), to accomplish the desired effects across the spectrum of military operations. In coordination with functional component commanders, the JFACC formulates a recommendation for the JFC/CJTF to utilize air assets based on the assigned objectives. This recommendation is doctrinally known as the apportionment decision, and provides the foundation for the Joint Air Operations Plan (JAOP) ultimately leading to the publication of the Air Tasking Order (ATO).³ Due to the limited assets available to the JFACC, efficient use of airpower remains critical to achieve the JFC/CJTF's objectives.

The JFACC's first priority in air operations is to achieve air superiority. Air superiority is defined as "that degree of dominance that permits friendly land, sea, air, and space forces to operate at a given time and place without prohibitive interference by

³ Joint Chiefs of Staff, Joint Pub 3-30, II-1-II-2.

the opposing force.”⁴ The apportionment recommendation from the JFACC will focus on the counterair mission during the initial stages of an air operation. Depending on the objectives, air supremacy might be realized without seriously degrading the availability of aircraft for other JFC/CJTF priorities to include air support for ground maneuver elements. Air supremacy is defined as “that degree of superiority wherein opposing air and space forces are incapable of effective interference anywhere in a given theater of operations.”⁵ Although air supremacy provides the highest level of protection from air attack in the joint operations area, serious consideration must be given by the JFACC to determine the most efficient use of airpower to achieve the joint force objectives. If supremacy or superiority is not attained, the success of strategic attack and counterland missions will be degraded, thus opening ground forces to the threat of attack. Once supremacy or superiority is attained, the JFACC’s apportionment recommendations become less confrontational with the land component and the majority of air missions will support the tactical operations of Army, Marine Corps, and Special Operations Forces (SOF) maneuver elements.

To gain the most efficiency from assigned air forces, centralized control is an essential element of the JFACC’s command and control structure. Centralized control of air assets allows the JFACC to prioritize and redirect missions during tactical execution.⁶

⁴ Air Force, Air Force Basic Doctrine, Air Force Doctrine Document 1 (Maxwell Air Force Base, AL: Air Force Doctrine Center, 17 November 2003), 77.

⁵ Ibid.

⁶ Joint Chiefs of Staff, Joint Pub 3-30, I-3.

The foundation for the command and control of air assets in a contingency operation is the JAOC organization as identified in joint doctrine.⁷

The JAOC is the staff instrument to execute command and control of forces under the operational or tactical command authority of the JFACC. Through the JAOC staff, the JFACC directs the assessment, planning and execution of assigned forces to accomplish the objectives of the JFC/CJTF. When the JFACC is directed to support functional component commanders such as the Joint Force Land Component Commander (JFLCC), Joint Force Maritime Component Commander (JFMCC), and Joint Force Special Operations Component Commander (JFSOCC), the JAOC is the main conduit to coordinate with the component staffs. Coordination between the functional component commanders can be strained depending on the complexity of the operation, the experience of the staff, and the quality of the liaison officers exchanged.

During recent operations in Iraq and Afghanistan, the services committed resources to improve coordination within the functional component commander's staffs. Recently published joint doctrine outlines a new liaison element called the Air Component Coordination Element (ACCE) that was specifically designed to enhance coordination with the JFLCC. Collocated with the JFLCC, the ACCE serves as the senior JFACC representative by providing assistance and expertise on intelligence, air control measures, joint fire support, and close air support.⁸

⁷ Ibid, II-5.

⁸ Joint Chiefs of Staff, Joint Doctrine for Joint Tactics, Techniques, and Procedures for Close Air Support, Joint Pub 3-09.3 (Washington, DC: 3 September 2003), II-5.

For those familiar with the close air support mission, the ACCE does not supercede the Air Support Operations Center (ASOC).⁹ In Joint and Air Force doctrine the ASOC remains the primary channel for ground forces to coordinate and execute tactical requests. An examination of the command and control structure of the Air Force's Theater Air Control System reveals the ASOC is normally assigned to the senior Army element or corps to coordinate air support within a designated joint operations area.¹⁰ The ACCE is as an additional staff element to assist the senior ground element's staff.

Considering the complexity of future major combat operations and the limited scope of current air operations in Iraq and Afghanistan, command and control of all air support must be streamlined to gain operational efficiencies. In addition, the Army's transformation to a modular concept with three new command echelons designated as the UEy, UEx, and Brigade Combat Team, requires further examination of air support requirements.¹¹ Lessons learned in Iraq indicate the integration improvements fostered

⁹ Air Force, Organization and Employment for Air and Space Operations, Air Force Doctrine Document 2 draft (Maxwell Air Force Base, AL: Air Force Doctrine Center First Coordination Draft Version 4b Dated 10 May 2004), 88-89. Draft document is not for implementation or guidance but is available for review and input on the Air Force Doctrine Center's web site <<https://www.doctrine.af.mil/Library>> [31 January 2005]. Although the document is not to be implemented until approved by the Air Force Chief of Staff, input for the Air Component Coordination Element (ACCE) is based on practical implementation during Operations ENDURING FREEDOM and IRAQI FREEDOM and recent inclusion in approved Joint Pub 3-30.

¹⁰ Joint Chiefs of Staff, Joint Pub 3-09.3, II-7.

¹¹ Jen DiMascio, "PBD Links FCS with New Force Structure: Army Receives \$25 Billion Boost to Bolster Modularity Program." Inside Defense. 10 January 2005. <<http://www.insidedefense.com>> [31 January 2005].

by the ACCE was a positive transformation step.¹² Additional transformation initiatives with the service provide a unique opportunity to develop a modular air support staff which is collocated with the senior ground element, regardless of service, to ensure compatibility with the future joint force.

Analysis

The evolution of the JFACC concept within the joint community began with Operation DESERT STORM and has provided ample points for discussion since. The Air Force committed to the JFACC mission and promoted it in Joint and Air Force doctrine. A technological commitment was also made to develop and standardize communication and data processing systems to support the Air Operations Center (AOC), ultimately leading to the designation of the AOC as a weapons system (AN/USQ-163) known as the “Falconer”.¹³ The weapons system label permits the Air Force to budget, develop, assign personnel, train, maintain, and deploy elements of the AOC as a standardized system for each air component in the combatant commands. The flexibility of the regional or theater AOC as a modular weapons system enables support of taskings from small scale operations to a major war.

Joint doctrine recognizes the JFACC as the functional component commander exercising control of assigned theater air assets in support of a designated JFC mission. The service providing the preponderance of air assets and the capability to control them is

¹² Cynthia Di Pasquale, “Joint Warfighting Came of Age in Iraq: OIF Lessons Learned Showcase USAF Progress in Transformation.” Inside Defense. 4 February 2005. <<http://www.insidedefense.com>> [13 February 2005].

¹³ Air Force Department, Operational Procedures-Aerospace Operations Center, Air Force Instruction 13-1AOC, Volume 3 (Washington, DC: 1 July 2002), 7. <<http://www.e-publishing.af.mil/pubs>> [31 January 2005]. The acronym AOC is primarily used in this publication. When the AOC is employed in a joint environment, the AOC acronym assumes the joint label and is then designated the JAOC.

normally designated as the JFACC.¹⁴ Operational missions normally assigned to the JFACC include counterair, counterland, search and rescue, airlift, air refueling, and intelligence, surveillance, and reconnaissance.¹⁵ The Air Force's Falconer weapons system provides the required command and control means and currently remains the only service system capable of supporting JFC/CJTF air operations across the range of military options. In recognition of the Air Force's JAOC capability, the U.S. Navy is revising its position and accepting the land based JAOC as the primary command and control node for JFC/CJTF air operations. The JFACC afloat concept will be discontinued and the JFMCC will establish an air command and control capability. In addition, the Navy intends to restructure joint billets allocated to the Navy to increase the number of personnel assigned to the JAOC staff.¹⁶

The joint nature of the JAOC requires a diversified staff with the expertise to provide tactical and operational level knowledge on combat systems unique to each of the services. Personnel assigned to permanent billets or liaison positions on the JAOC staff are expected to plan, direct, and execute air operations under the tactical or operational control of the JFACC. It is critical for component commanders to provide knowledgeable personnel and liaison officers if the JAOC staff is to function effectively and efficiently. Lessons learned from Operation IRAQI FREEDOM indicate effective

¹⁴ Joint Chiefs of Staff, Joint Pub 3-30, II-1.

¹⁵ Air Force, Air Force Doctrine Document 1, 38.

¹⁶ Derrill T. Goldizen. <goldized@nwc.navy.mil> "JFACC-Afloat Concept Terminated." [E-mail to Michael J. Homola <michael.homola@nwc.navy.mil>] 11 February 2005. Email contains defense message traffic from COMSECONDFLT to CNO WASHINGTON DC date time group 082135Z NOV 04 with SUBJ: 2004 NAVY COMMAND AND CONTROL OF AIR OPERATIONS (NC2AO)/OAG-ESC ANNOUNCEMENT.

training programs and the mechanisms to track previous experience do not exist for component liaison officers.¹⁷

An efficient and trained JAOC is critical for managing the diversity of air assets available in the joint force, coordinating requirements for counterland missions, and to minimize the danger of fratricide. According to Air Force doctrine

counterland effects focus at the tactical and operational levels of war, targeting the fielded enemy surface forces and the infrastructure which directly supports them, and will indirectly lead to strategic effects by denying the enemy the ability to execute ground combat strategy.¹⁸

Counterland operations incorporating both interdiction and close air support require extensive coordination with the land component commander to ensure the safety of ground maneuver forces especially within an evolving battlefield. The diversified tactics, techniques, and procedures used by the military services to execute the counterland mission, specifically close air support, require examination for transformation initiatives.

Three areas of interest to consider for close air support improvements include joint and service doctrine, force application at the tactical level of war, and command and control at the operational level of war. In June 2003, the Under Secretary of Defense for Acquisition, Technology and Logistics directed the Defense Science Board to establish a Task Force on Integrated Fire Support in the Battlespace. In October 2004 the Task Force reported:

To take advantage of the full potential for joint fires and close air support in a future characterized by non-linear battlespace operations, zero

¹⁷ "Joint Operational Fires: A 1st BCD Perspective from Operation Iraqi Freedom." Inside Defense. October 2003. <http://www.insidedefense.com/secure/data_extra/pdf3/dplus2004_3211.pdf> [31 January 2005].

¹⁸ Air Force, Counterland, Air Force Doctrine Document 2-1.3 (Maxwell Air Force Base, AL: Air Force Doctrine Center, 27 August 1999), 1.

tolerance for fratricide and collateral damage and emerging expanded capabilities in coordinate-seeking weapons (CSW), there must be a commensurate improvement in the approach that our forces employ in command and control for fires, both within the Services and in joint fire support across Services.¹⁹

In consideration of the first area of interest, the joint community instituted close air support reforms and developed the foundation for the future, joint doctrine. The Marine Corps was the lead agent for Joint Publication 3-0.9.3, Joint Tactics, Techniques, and Procedures for Close Air Support, and it was published in September 2003.²⁰

Establishing joint doctrine was a major step in instigating close air support standardization, and supporting doctrine has followed in each of the services. However, doctrine is only the first step in providing a truly joint mission environment.

The second area of interest to improve close air support is the tactical level of control required to relay information between the aircrew and the ground controller. This aspect of close air support has been a prominent topic for discussion and research due to different views on the availability of close air support missions and the risk of fratricide. The Marine Corps provides the most integrated concept of air and ground operations in the form of the Marine Air Ground Task Force (MAGTF). The combined arms capability of the MAGTF enables aircraft to directly support ground maneuver elements with tactical efficiency and accuracy. However, the training and employment of the MAGTF is inherently Marine Corps-centric, with Navy air elements trained to provide

¹⁹ Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. Report of the Defense Science Board Task Force on Integrated Fire Support in the Battlespace (Washington, DC: October 2004), 55. <http://www.acq.osd.mil/dsb/reports/2004-10-Integrated_Fire_Support.pdf> [31 January 2005].

²⁰ Arthur P. Brill, Jr., "Close Air Support: More Improvement is Needed," Sea Power, (November 2003): 15.

additional fire power if required. The Army has developed technologically advanced helicopters and ground-to-ground weapons systems to enhance support of their maneuver elements, but the Air Force remains the principle provider of close air support for Army maneuver elements through specialized aircraft and numerous multi-role aircraft using Joint Direct Attack Munitions (JDAMs).

Joint initiatives like it developed core objectives and enhanced the ability of terminal air controllers embedded with ground maneuver forces to facilitate close air support. Insufficient training, the lack of common equipment, and now standardized tactics, techniques, and procedures are all lessons learned which can be traced back to exercises and operations in the last decade. The implementation of the Joint Terminal Attack Controller (JTAC) identified in joint doctrine provides commonality in concept and should improve standardization.²¹ Unfortunately, diverse training programs for terminal air controllers and aircrew in the Army, Marine Corps, Navy, and Air Force still exist and contribute to confusion on the battlefield even with doctrine in place.²²

To enhance tactical improvements on the battlefield, service barriers must be eliminated. Recent progress in this forum is apparent with the establishment of the Joint Air-Ground Operations office at the U.S. Air Force Air Combat Command in 2004. The intention is to assign Army personnel from the Training and Doctrine Command and Army Forces Command to the Joint Air-Ground Operations (JAGO) office. The focus of the office will be to improve coordination and develop initiatives for air-to-ground

²¹ Joint Chiefs of Staff, Joint Pub 3-09.3, V-1.

²² Michael W. Binney, Joint Close Air Support in the Low Intensity Conflict (Monterey, CA: Naval Postgraduate School, June 2003), 43. <<http://library.nps.navy.mil/uhtbin/hyperion-image/03Jun%5FBinney.pdf>> [31 January 2005].

operations.²³ This is a promising multi-service initiative to advance Air Force and Army interaction on the battlefield. In the joint community, the primary responsibility for developing tactics, techniques, and procedures for the close air support mission now rests with U.S. Joint Forces Command. As the lead agent, Joint Forces Command is examining requirements for training and equipment across the services to identifying solutions for better joint performance in future wars.²⁴

The third area of interest for close air support improvement is command and control at the functional component command. The JAOC is the senior command and control element for an Air Force JFACC and has been a core aspect of joint operations over the last decade to include Operations ENDURING FREEDOM and IRAQI FREEDOM. With the Navy's acceptance of a land based JAOC, the JAOC will more than likely be supported by the Falconer weapons system even if the JFACC is from a service other than the Air Force. Establishing standard operating procedures and diversifying the personnel assigned to the JAOC will enhance joint interoperability with functional component commands even though communications connectivity will continue to challenge geographically separated staffs. To address this challenge, the next logical step is to develop a modular command and control element for the senior ground element in the joint theater that emphasizes a multifaceted approach to plan, execute, and direct air support, specifically close air support.

²³ Elizabeth Rees. "ACC, FORSCOM, TRADOC Working Together: Air Force, Army Look to Share Personnel in Air-Ground Ops Offices." *Inside Defense*. 20 December 2004. <http://www.insidedefense.com/secure/defense_docnum.asp?f=defense_2002.ask&docnum=Army-16-51-18> [31 January 2005].

²⁴ Brill, 17.

Recommendation

An examination of joint and Air Force doctrine in place or under revision reveals a variety of service systems and procedures for operational and tactical command and control of air operations. The services must maintain tactical systems to ensure command and control for independent Army, Marine Corps, Navy, and Air Force air operations. These systems must incorporate joint interoperability standards. Future joint operations would draw greater benefit from the standardization of command and control structures at the tactical and operational levels of command.

Stove-piped command and control architectures contained in the Army Air Ground System (AAGS), Air Force Tactical Air Control System (TACS), Marine Air Command and Control System (MACCS), and Navy Tactical Air Command and Control System (NTACS) need to adjust to the requirements of the joint ground commander. Development of a Joint Tactical Air Command and Control System (JTACCS) as identified in Major Binney's Naval Postgraduate School thesis, Joint Close Air Support in the Low Intensity Conflict, would dissolve service unique designs and establish command and control systems based on a joint model. A joint command and control design for tactical employment of air operations would eliminate the challenges associated with multiple systems and provide common doctrine, training, and execution capability. While battle management interoperability at the tactical level would be enhanced with a JTACCS, a gap still exists at the operational level in the midst of functional component commander's staff.²⁵

²⁵ Binney, 60-61.

Currently, the functional component commanders use direct communication links and liaison officers to facilitate interoperability and coordinate air support. The Defense Science Board Task Force on Integrated Fire Support in the Battlespace specifies:

Although these agencies work closely together to achieve mission objectives, they are separate organizations run by their respective service component commander. A joint agency has not been established to coordinate fire support; rather, liaison officers are assigned to facilitate communications between the agencies. The emphasis should be on integration rather than coordination to achieve mission success.²⁶

According to joint doctrine, the JFLCC dispatches the Battlefield Coordination Detachment (BCD) to the JFACC staff and the JFACC dispatches the ACCE to the JFLCC staff. The BCD and ACCE remain subordinate to their respective components and act as direct liaisons to assist coordination and improve interoperability. The primary functions of the BCD are to coordinate preplanned close air support requests, airspace control measures, and joint fire support coordination measures with the JFACC. The ACCE performs similar functions for the JFLCC in addition to other air support assistance such as airlift and intelligence.²⁷

Doctrine reflects the Task Force on Integrated Fire Support in the Battlespace finding: liaison positions exist for coordination and not command and control. In addition, functional component commander staffs are not integrated to provide efficient fire support for ground maneuver operations. The Task Force recommends developing a Joint Integrated Fire Support System (JIFSS) to

employ a command and control approach that ensures that the best available target acquisition, attack and BDA resources are made available

²⁶ Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, 57.

²⁷ Joint Chiefs of Staff, Joint Pub 3-0.9.3, II-5-II-9.

across the Services, to achieve the maneuver commander's desired effects and purpose, blurring the distinction among strike, fires, and close air support.²⁸

Based on the Defense Science Board recommendation for a JIFSS and the doctrinal definitions of the ACCE and BCD, a practical solution for an operational level improvement can be attained by expanding the ACCE into a modular and deployable Joint Air Component Coordination Element (JACCE) with enhanced command authorities. The JACCE would remain under the operational command of the JFACC and continue to be embedded with the senior ground element's staff. Incorporating multi-service expertise into the modular JACCE construct, such as personnel from the BCD, Marine Air Ground Task Force, and the SOF community, would facilitate a broader commitment to providing the necessary airpower resources for the supported ground commander in a variety of employment scenarios.

For example, expanding the JACCE would provide additional flexibility to support a variety of components. A JACCE deployed to a Joint Forces Special Operations Component Commander (JFSOCC) provides the opportunity for the SOF commander to voice requirements for air support directly to a collocated representative from the JAOC. The JACCE would have the authority to deconflict air missions, coordinate planning, and reprioritize targeting within a defined joint operations area. The Special Operations Liaison Element (SOLE) at the JAOC in the early stages of Operation ENDURING FREEDOM concentrated primarily on deconfliction and as a result,

²⁸ Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, 68.

targeting coordination was strained.²⁹ A JACCE collocated with the JFSOCC would have provided additional expertise to improve planning, deconfliction, and targeting in a volatile environment.

Three issues quickly arise from the modular JACCE proposal. First, what does it provide the JFLCC and what does it take away from the JFACC? Second, why add another layer to a functional component commander's staff when boards and cells already exist to handle JFACC and JFLCC coordination issues? Third, interoperability and training challenges will surface and negatively impact direct coordination between the JFLCC and JFACC staff. As with any new approach to command and control of air operations, consideration will need to be given to these and other issues but the benefits of a truly integrated air support element would improve the combat effectiveness of the joint force.

The first issue addresses the capability lost or gained by each of the functional component commanders involved. In the JACCE approach, the JFACC would relinquish command and control of counterland missions for a specified joint operations area directly to the JACCE. The JACCE would have the authority to redirect missions within the assigned joint operations area. Air interdiction and close air support missions would continue as tasked under the tactical control of ground and airborne command and control systems unless redirected during tactical execution. If a situation develops within the joint air operations requiring operational level involvement, the land component commander can coordinate directly with the JACCE staff for air support missions. The

²⁹ Mike Findlay, Robert Green, and Eric Braganca. "Fires and Maneuver-Challenges on the Noncontiguous Battlefield." Air Land Sea Bulletin. March 2003. <<https://wwwmil.alsa.mil/alsb.htm>> [17 December 2004], 20.

embedded JACCE staff would have direct knowledge on the request and still be able to provide objective guidance on the efficient use of air assets, since the JACCE still works for the JFACC. The current ACCE concept does not provide the command authority for direct reprioritization. As identified in lessons learned following IRAQI FREEDOM, the ACCE provided presence within the land component commander's staff for planning, and disseminated the functional air component commander's perspective on joint operations.³⁰ Decentralization of air assets to a JACCE with command authority would enhance air support responsiveness for the supported land component commander.

To address the second issue of adding an additional staff function when coordination elements already exist, a review of joint doctrine is necessary. Focusing on the close air support mission, two potentially duplicative staff functions exist within joint doctrine. In order to accomplish JFC/CJTF objectives, functional component commanders may establish doctrinally based boards, centers, and cells in the combatant and component commander's staffs. One such board, normally established by the JFC as an aid to well-organized targeting, is the Joint Targeting Coordination Board (JTCB). As defined in joint doctrine, the JTCB "facilitates and coordinates the targeting activities of the components to ensure that the JFC's priorities are met." Routinely located at the JFC's headquarters, the primary focus of the JTCB is to ensure apportionment decisions and targeting priorities directed by the JFC are carried out by each of the components. In the words of joint doctrine, the "JTCB maintains a macro-level view of the operational area." Since the JTCB is normally resident at the JFC's headquarters and focuses on

³⁰ Williamson Murray, ed., A Nation at War in an Era of Strategic Change (Carlisle, PA: Strategic Studies Institute, September 2004), 318.

broad operational issues, it does not provide an avenue for the supported functional ground component commander to address immediate issues that occur during execution and could be solved without the JFC's involvement.³¹

The JAOC focuses on planning, coordination, and direction to accomplish JFC/CJTF objectives and to coordinate requirements for supported commanders. To facilitate coordination with functional component commanders, the Joint Guidance, Apportionment, and Targeting (JGAT) team may be established in the JAOC. The JGAT is a doctrinally based organization that concentrates on air support and targeting to convert the Joint Air Operations Plan (JAOP) into an Air Tasking Order (ATO). The JGAT relies on inputs from the functional component commanders to build a consolidated. The Deputy JFACC, key JAOC staff members, and component liaisons provide oversight and contribute to the JGAT mission. As with the JTCB, the JGAT performs a necessary function in the joint air operations environment but it is not a command and control element for an evolving battlespace.³²

The third issue concerning the JACCE is the potential to obstruct JFACC and JFLCC interoperability and the request training required. Clearly defining the roles and responsibilities will go a long way in reducing the confusion of the embedded JACCE. During Operation IRAQI FREEDOM, the ACCE initially added a layer of ambiguity to the land component commander's staff but the situation stabilized when clear organizational direction was provided.³³ The JACCE would provide planning expertise

³¹ Joint Chiefs of Staff, Joint Pub 3-30, III-17.

³² Ibid, III-18.

³³ Murray, 315-316.

and immediate execution authority on the JFLCC's staff to accommodate operational level decisions in a defined joint operations area. The JACCE would not have the capability to fulfill the role of the JAOC. JFLCC staff elements would need to retain direct coordination with the JAOC for long range planning and support.

Personnel and training are another aspect to consider for the JACCE. Identifying the JACCE as a subordinate organization of the JAOC provides an avenue to create additional billet requirements in an existing weapons system. As a joint system, each of the services would have to evaluate the benefit of the JACCE and offer support to the proposal. Training programs can be developed under the current programs in place for the JAOC.³⁴ During training development, alternative benefits of the JACCE can be evaluated. An additional role for the JACCE may include involvement in tactical level mission planning. Mission commanders assigned by the JFACC in the air tasking order could coordinate with the JACCE for planning and coordination information on ground maneuver forces. However, each of the roles and responsibilities assigned to the JACCE would need to be vetted to ensure the modular concept remains viable to prevent it from becoming unsupportable.

During current operations in Afghanistan and Iraq, air support is a joint mission. Future operations will inherently become more joint due to limited numbers of combat aircraft within all the services. Measures must be taken to streamline the command and control architectures in place to provide tactical and operational air support for ground operations under the leadership of Army, Marine Corps, or Special Operations Forces

³⁴ Air Force Department, Ground Environment Training-Aerospace Operations Center, Air Force Instruction 13-1AOC, Volume 1 (Washington, DC: 1 November 2002), 10. <<http://www.e-publishing.af.mil/pubs>> [31 January 2005].

commanders. The lessons learned developing the ACCE provides a foundation to transform command and control structures and enhance air support in the joint arena. In Operation IRAQI FREEDOM, the ACCE was an innovative method to embed air expertise with the land component commander to assist in execution level planning and to facilitate coordination with the air operations center. Deficiencies in the ACCE composition included the number of personnel assigned, undefined mission roles, and knowledge of the air operations center. In addition, the BCD was identified as lacking the appropriate level of manning and expertise.³⁵

A doctrinal review of the recommended personnel for the ACCE staff indicates intelligence, airspace management, planning, and airlift are core elements. The capability of the ACCE to act as a liaison element for Marine, Army, or SOF operations is also apparent. Incorporating a broader array of joint billets in the modular JACCE concept would provide an authoritative command and control capability air support in an operational theater. With the JACCE, senior land component commanders would now have a collocated capability to directly interface with a JFACC element to plan, direct, and execute operational level decisions.

Conclusion

As the military services transform, command and control architectures will need to reflect both tactical and operational level interoperability. The mission of close air support is a recurring point of contention in the joint arena and requires a thorough examination to eliminate inefficiencies. In the past, close air support rose to the surface during ground combat operations and routinely faded from focus once the objective was

³⁵ Murray, 303.

achieved and lessons learned published. As the size of ground forces available for operations is reduced, as in Operations ENDURING FREEDOM and IRAQI FREEDOM, close air support requirements will continue to increase to protect forces from the inherent risks of combat. The need for close air support enhancements is apparent and can only be accomplished with transformation initiatives that focus on the total force. Establishing a Joint Air Component Coordination Element (JACCE) as a joint organization with the appropriate personnel and training will provide the command and control authority required to deliver close air support to the supported ground commander, be it a JFLCC or another senior ground element.

Bibliography

- Binney, Michael W. Joint Close Air Support in the Low Intensity Conflict. Monterey, CA: Naval Postgraduate School, June 2003.
<<http://library.nps.navy.mil/uhtbin/hyperion-image/03Jun%5FBinney.pdf>> [31 January 2005].
- Brill, Arthur P., Jr., "Close Air Support: More Improvement is Needed." Sea Power (November 2003): 15-18.
- Campbell, Douglas N. The Warthog and the Close Air Support Debate. Annapolis, MD: Naval Institute Press, 2003.
- Corum, James S. and Wray R. Johnson. Airpower in Small Wars: Fighting Insurgents and Terrorists. Lawrence, KS: University Press of Kansas, 2003.
- DiMascio, Jen. "PBD Links FCS with New Force Structure: Army Receives \$25 Billion Boost to Bolster Modularity Program." Inside Defense. 10 January 2005.
<<http://www.insidedefense.com>> [31 January 2005].
- Di Pasquale, Cynthia. "Gen. Says Renewed Focus with Army on Close Air Support Paid Off in Iraq." Inside Defense. 22 November 2004. <<http://www.insidedefense.com>> [7 January 2005].
- _____. "Joint Warfighting Came of Age in Iraq: OIF Lessons Learned Showcase USAF Progress in Transformation." Inside Defense. 4 February 2005.
<<http://www.insidedefense.com>> [13 February 2005].
- Findlay, Mike, Robert Green, and Eric Braganca. "Fires and Maneuver-Challenges on the Noncontiguous Battlefield." Air Land Sea Bulletin. March 2003.
<<https://wwwmil.alsa.mil/alsb.htm>> [17 December 2004].
- Fontenot, Gregory, E.J. Degen, and David Tohn. On Point: US Army in Operation IRAQI FREEDOM. Fort Leavenworth, Kansas: Combat Studies Institute Press, 2004.
<<http://onpoint.leavenworth.army.mil>> [14 January 2005].
- Goldizen, Derrill T. <goldized@nwc.navy.mil> "JFACC-Afloat Concept Terminated." [E-mail to Michael J. Homola <michael.homola@nwc.navy.mil>] 11 February 2005.
- Haun, Phil M. Misty FACs of Vietnam and A-10 FACs of Kosovo-A Comparative Analysis. Maxwell Air Force Base, AL: Air University Press, May 2004.
<<http://aupress.maxwell.af.mil>>. [17 December 2004].
- "Joint Operational Fires: A 1st BCD Perspective from Operation Iraqi Freedom." Inside Defense. October 2003.

<http://www.insidedefense.com/secure/data_extra/pdf3/dplus2004_3211.pdf> [31 January 2005].

Kirkpatrick, Charles E., "Joint Fires as They Were Meant to Be: V Corps and the 4th Air Support Operations Group During Operation Iraqi Freedom," Association of the United States Army Institute of Land Warfare Paper, no. 48 (October 2004).

Murray, Williamson, ed. A Nation at War in an Era of Strategic Change. Carlisle, PA: Strategic Studies Institute, September 2004.

"Operation IRAQI FREEDOM – By the Numbers." Assessment and Analysis Division United States Central Air Forces. 30 April 2003.
<http://www.insidedefense.com/secure/iraqlessons_main.asp> [17 December 2004].

Rees, Elizabeth. "ACC, FORSCOM, TRADOC Working Together: Air Force, Army Look to Share Personnel in Air-Ground Ops Offices." Inside Defense. 20 December 2004.
<http://www.insidedefense.com/secure/defense_docnum.asp?f=defense_2002.ask&docnum=Army-16-51-18> [31 January 2005].

U.S. Air Force. Air Force Basic Doctrine. Air Force Doctrine Document 1. Maxwell Air Force Base, AL: Air Force Doctrine Center, 17 November 2003.

U.S. Air Force. Counterland. Air Force Doctrine Document 2-1.3. Maxwell Air Force Base, AL: Air Force Doctrine Center, 27 August 1999.

U.S. Air Force. Organization and Employment for Air and Space Operations. Air Force Doctrine Document 2 draft. Maxwell AFB, AL: Air Force Doctrine Center First Coordination Draft Version 4b Dated 10 May 2004.
<<https://www.doctrine.af.mil/Library>> [31 January 2005].

U.S. Air Force Department. Operational Procedures-Aerospace Operations Center. Air Force Instruction 13-1AOC, Volume 3. Washington, DC: 1 July 2002.

U.S. Air Force Department. Ground Environment Training-Aerospace Operations Center. Air Force Instruction 13-1AOC, Volume 1. Washington, DC: 1 November 2002.

U.S. Army. Operations. Field Manual 3-0. Washington, DC: June 2001.

U.S. Army. Stability Operations and Support Operations. Field Manual 3-07. Washington, DC: February 2003.

U.S. Joint Chiefs of Staff. Joint Doctrine for Command and Control for Joint Air Operations. Joint Pub 3-30, Washington, DC: 5 June 2003.

U.S. Joint Chiefs of Staff. Joint Doctrine for Joint Tactics, Techniques, and Procedures for Close Air Support. Joint Pub 3-09.3, Washington, DC: 3 September 2003.

U.S. Marine Corps. Marine Corps Operations. Marine Corps Doctrinal Publication 1-0. Washington, DC: 27 September 2001.

U.S. Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. Report of the Defense Science Board Task Force on Integrated Fire Support in the Battlespace. Washington, DC: October 2004.
<http://www.acq.osd.mil/dsb/reports/2004-10-Integrated_Fire_Support.pdf> [31 January 2005].